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REMARKS

Claims 1-20 are pending in the present application. Claims 1-11, and 13-20 have been amended, and Claims 21-22 have been added, leaving Claims 1-22 for consideration upon entry of the present Amendment.

Claims 1-8, 10-11, and 13-20 have been amended to simply change the claims from a European form, which included reference numerals in the claim, to an American form having no reference numerals in the claims, as well as to correct some grammatical errors.

Antecedent basis for the amendment to Claims 1 and 7 can at least be found at page 10, lines 1-16 of the specification.

Antecedent basis for new Claim 21 can at least be found at original Claim 1 and page 9, lines 19-26 of the specification.

Antecedent basis for new Claim 22 can at least be found at page 7, line 28 to page 8, line 8 of the specification.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

Specification

Applicants have corrected the informality noted by the Examiner on page 5, lines 23-24 of the specification. More particularly, Applicants have amended the specification to include the reference to U.S. Patent Application No. 10/110,021 relating to Attorney Docket No. DP-301500/DP-301244B (DEP-0133F). Accordingly, Applicants respectfully request withdrawal of the objection.

Claim Objections

Applicants have amended Claims 1 and 7 for clarity. As such, the claims no longer contain the language objected to by the Examiner in the Office Action.

Claims 3, 9, and 17 have been amended to correct the informalities noted by the Examiner. More particularly, the word "including" has been removed and the word "is" has been inserted between "ceramic" and "selected" to place the claims in an acceptable Markush form.

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Accordingly, Applicants respectfully request withdrawal of these objections.

Claim Rejections Under 35 U.S.C. §102(b)

Claims 1-3, 5-9, and 11-12 stand rejected under 35 U.S.C. §102(b), as allegedly anticipated by U.S. Patent No. 5,817,920 to Kuisell et al. Applicants respectfully traverse this rejection.

Applicants' independent Claim 1 is directed to a gas sensor, comprising: a sensing element, having a lower portion disposed within a subassembly and an upper portion disposed within a wiring harness assembly comprising an upper shield disposed around a wiring harness; a terminal support disposed within the wiring harness, wherein the terminal support comprising a channel extending therethrough, the channel comprising an indentation; a first portion of a terminal disposed within the indentation of the terminal support and in electrical communication with the sensing element; and an insulator at least partially disposed within the upper shield and around the sensing element upper portion, the insulator having a passage for receiving a second portion of the terminal.

Kuisell et al. teach a terminal adapter, upper insulator, outer shield, wedge ring, lower insulator, and a portion of a sensing element located within an upper shield. (Col. 2, lines 11-15). Terminals engage female terminal slots, which are connected to electrical wires. (Col. 3, lines 50-51). The terminals are tightly fitted in the cylindrical openings passing through the terminal adapter. (Col. 3, lines 52-54).

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Kuisell et al. at least fail to teach "a terminal support disposed within the wiring harness, wherein the terminal support comprises a channel extending therethrough, the channel comprising an indentation; a first portion of a terminal disposed within the indentation of the terminal support and in electrical communication with the sensing element." Rather, Kuisell et al. teach that the terminals are tightly fitted in the cylindrical openings passing through the terminal adapter. In other words, absent in Kuisell et al. is any teaching that a terminal is disposed "within the indentation of the terminal support." Kuisell et al. only teach a terminal disposed within a channel. Moreover, compare Figure 1 of Kuisell et al. to Applicants' Figures 2

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and 6, absent in Figure 1 of Kuisell et al. is a "channel comprising an indentation". The indentation shown in Applicants' Figure 2 is called out in the drawing with reference numeral 132. Since Kuisell et al. at least fail to teach "the channel comprising an indentation," they do not teach each and every element of Applicants independent Claims 1. Applicants' independent Claim 7 also teaches "the terminal support comprising a channel extending therethrough, the channel comprising an indentation." Accordingly, Kuisell et al. do not anticipate Applicants' independent Claims 1 and 7. Moreover, as a dependent claim from an allowable independent claim, Claims 2-3, 5-6, 8-9, and 11-12 are, by definition, also allowable.

Claims 13, 16, and 17 stand rejected under 35 U.S.C. §102(b), as allegedly anticipated by U.S. Patent No. 5,329,806 to McClanahan et al. Applicants respectfully traverse these rejections.

Applicants' independent Claim 13 is directed to a gas sensor, comprising: a sensing element, having a lower portion disposed within a subassembly and an upper portion disposed within a wiring harness assembly comprising an upper shield disposed around a wiring harness; a one-piece seal, the seal having a body disposed in a first portion of the upper shield, and a flange wherein an edge of the upper shield is disposed between at least a portion of the flange and the body; a shell disposed around the lower portion of the sensing element; a first insulator, wherein at least a portion of the first insulator is disposed between the sensing element and the shell; a lower shield disposed around an end of the sensing element, the lower shield in physical contact with the shell, and having a plurality of apertures; at least one terminal in electrical communication with the sensing element; and a terminal support in physical contact with the terminal.

McClanahan et al. teach an oxygen sensor including an upper shield, a body, a lower shield, and a cap all connected together to form the oxygen sensor housing. (Col. 2, lines 61-64). A plug or seal may be inserted into the oxygen sensor cap. (Col. 3, lines 24-26). The cap may include a first resilient lock for releasably locking onto a ridge formed on an upper portion of the body of the sensor. The first resilient lock may be an inwardly extending lip or a resilient finger at the lower edge of the cap. (Col. 3, lines 46-50).

McClanahan et al. at least fail to teach "a one-piece seal, the seal having a body disposed in a first portion of the upper shield, and a flange wherein an edge of the upper shield is disposed

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between at least a portion of the flange and the body.” Rather, McClanahan et al. teach that a plug or seal may be inserted into the oxygen sensor cap. In other words, McClanahan et al. teach the use of two components, i.e., a plug/seal and a cap. This configuration is sometimes referred to in the art as a seal and a boot. The seal fits within the cap and does not comprise, e.g., a flange. Since McClanahan et al. teach two components, they do not teach each and every element of Applicants’ independent Claim 13. Since they do not teach each and every element of Applicants’ claimed invention, McClanahan et al. do not anticipate Claim 13.

Furthermore, since McClanahan et al. teach two components, they do not teach, *inter alia*, “a one-piece seal, the seal having a body disposed in a first portion of the upper shield, and a flange wherein an edge of the upper shield is disposed between at least a portion of the flange and the body.” In other words, McClanahan et al. do not teach a seal having a flange. Instead, McClanahan et al. teach that the cap may include a first resilient lock for releasably locking onto a ridge formed on an upper portion of the body of the sensor. As such, McClanahan et al. fail to teach each and every element of Applicants’ independent Claim 13. Since they do not to teach each and every limitation of Applicants’ claimed invention, Claim 13 is not anticipated. Accordingly, Applicants’ independent Claim 13 is allowable. Moreover, as a dependent claim from an allowable independent claim, Claims 16-17 are, by definition, also allowable.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 4 and 10 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over U.S. Patent No. 5,817,920 to Kuisell et al. Claims 13 and 16-20 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over U.S. Patent No. 5,817,920 to Kuisell et al. in view of U.S. Patent No. 5,329,806 to McClanahan et al. Claims 14 and 15 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over U.S. Patent No. 5,817,920 to Kuisell et al. in view of U.S. Patent No. 5,329,806 to McClanahan et al., further in view of U.S. Patent No. 5,948,963 to Kato et al. Applicants respectfully traverse these rejections.

Kato et al. teach a gas sensor comprising “a sensor element for measuring a predetermined gas component contained in an introduced measurement gas, and a protective cover arranged to surround a forward end of the sensor element”. (Abstract). Additionally, Kato

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et al. teach the use of a ceramic powder, such as, talc between ceramic supports. (Col. 10, lines 57-60).

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

With regard to Claims 4 and 10, Applicants submit that these claims depended from allowable independent Claims 1 and 7 respectfully, and as such are, by definition, also allowable. More particularly, Kuisell et al. do not teach or suggest a "channel comprising an indentation." Rather, Kuisell et al. teach that the terminals are tightly fitted in the cylindrical openings passing through the terminal adapter. In other words, absent in Kuisell et al. is any teaching or suggestion that a terminal is disposed within the indentation of the terminal support. Since Kuisell et al. do not teach or suggest, *inter alia*, "a terminal support comprising a channel extending therethrough, said channel comprising an indentation," Applicants independent Claims 1 and 7 are not obvious over Kuisell et al. Moreover, as a dependent claim from an allowable independent claim, Claims 4 and 10, are, by definition, also allowable.

With regard to Claim 13, McClanahan et al. at least fail to teach or suggest "a one-piece seal, the seal having a body disposed in a first portion of the upper shield, and a flange wherein an edge of the upper shield is disposed between at least a portion of the flange and the body." Rather, as discussed above, McClanahan et al. teach that a plug or seal may be inserted into the oxygen sensor cap. In other words, McClanahan et al. teach the use of two components, i.e., a plug/seal and a cap. Since McClanahan et al. teach two components, they do not teach or suggest each and every element of Applicants' independent Claim 13. As such, even if McClanahan et al. were combined with Kuisell et al., the combined references would still fail to teach or suggest each and every element of Applicants independent Claim 13, since Kuisell et al. also fails to

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teach or suggest "a one-piece seal". As such, Claim 13 is not obvious over Kuisell et al. in view of McClanahan et al. Moreover, as a dependent claim from an allowable independent claim, Claims 14-20 are, by definition, also allowable.

With regard to Claims 14 and 15, the Examiner relied upon Kato et al. solely for their teachings of the use of talc powder. However, Kato et al. fail to cure the deficiencies of the above cited art. More particularly, Kato et al. fail to teach or suggest "a one-piece seal, the seal having a body disposed in a first portion of the upper shield, and a flange wherein an edge of the upper shield is disposed between at least a portion of the flange and the body." Since Kato et al. fail to teach or suggest at least this element, none of the above cited references, either alone or in combination, teach or suggest each and every element of Applicants' Claim 13. As such, Applicants' independent Claim 13 is not obvious over the above cited references. Moreover, as dependent claims from an allowable independent claim, Claims 14 and 15 are also allowable.

Accordingly, Applicants respectfully request withdrawal of the rejections and allowance of the claims.

Prior Art Made of Record

Applicants submit that Applicants' invention as defined by Applicants' claims is not anticipated by or obvious in view of the prior art made of record.

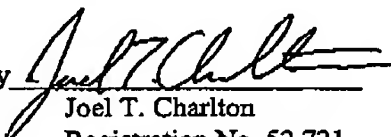
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It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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